

IN THE CLAIMS

1. - 3. (Canceled)

4. (Currently Amended) A magnetic thin film head comprising:

a write head element; and  
a read head element including a sensor film;  
wherein a ferromagnetic film having a soft magnetic characteristic and a magnetic shield function is provided formed of NiFe permalloy material by electroplating in the vicinity of said a sensor film arranged as said read head element,

wherein said ferromagnetic film comprises NiFe permalloy material and is formed by an electroplating method,  
wherein in a first region of said ferromagnetic film  
which exceeds a film thickness of exceeding 1.0  $\mu\text{m}$  from an initial formed layer, in said ferromagnetic film formed of NiFe permalloy material has an Ni content accuracy is of  $\pm 0.1$  wt%, and

wherein in a second region of said ferromagnetic film where a film thickness is of 1.0  $\mu\text{m}$  or less from said

initial formed layer, in said ferromagnetic film formed of  
NiFe permalloy material has an Ni content accuracy is of ±0.3  
wt%.

5. - 9 (Canceled)

10. (Currently Amended) A magnetic disk apparatus having a magnetic thin film head comprising:  
a magnetic disk;  
a magnetic disk driving unit;  
a magnetic thin film head comprising a write head element, and a read head element; and  
a magnetic head driving unit,  
wherein a ferromagnetic film having a soft magnetic characteristic and a magnetic shield function is formed of NiFe permalloy material by electroplating in the vicinity of a sensor film arranged as said read head element,  
wherein in a first region of said ferromagnetic film  
in which a film thickness exceedsing 1.0  $\mu\text{m}$  from an initial  
formed layer, in said ferromagnetic film formed of NiFe

~~permalloy material has an Ni content accuracy is of  $\pm 0.1$  wt%, and~~

~~wherein in a second region of said ferromagnetic film where a film thickness is of 1.0  $\mu\text{m}$  or less, in said ferromagnetic film formed of NiFe permalloy material has an Ni content accuracy is of  $\pm 0.3$  wt%.~~

11. (New) The magnetic thin film head according to claim 4, wherein Ni in composition of said ferromagnetic film is 80.8 wt% to 82.0 wt%.

12. (New) The magnetic thin film head according to claim 4, wherein when said ferromagnetic film is formed, a current density used for the electroplating changes.